

High Mountain Dams in Upalco Unit,  
Milk Lake Dam  
Ashley National Forest  
9.4 miles northwest of Swift Creek Campground  
Mountain Home Vicinity  
Duchesne County  
Utah

HAER No. UT-42-K

HAER  
UTAH,  
7-MOHON,  
1-K-

#### PHOTOGRAPHS

#### WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record  
Rocky Mountain Regional Office  
National Park Service  
U.S. Department of the Interior  
P.O. Box 25287  
Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

High Mountain Dams in Upalco Unit, Milk Lake Dam

HAER No. UT-42-K

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Location: 9.4 miles northwest of Swift Creek Campground, Ashley National Forest  
Mountain Home vicinity, Duchesne County, Utah

UTM: 12.551440.4507760  
Quad: Garfield Basin

Date of Construction: 1935

Builder/Designer: Chester Hartman, George Rogers, and S. K. Daniels

Present Owner: Moon Lake Water Users Association, Roosevelt, Utah 84066

Original Use: Dam

Present Use: Dam

Significance: Situated picturesquely on the western tip of Milk Lake at the base of a steep mountainside, the Milk Lake Dam is perhaps the most visually striking of the Upalco Unit dams. It is technologically significant as the only grouted stone masonry dam in the Unit. Beset by structural problems since its completion and the subject of numerous Forest Service complaints, the dam's checkered history makes it appropriate as a symbol of Forest Service leniency and permittee noncompliance.

Inventoried by: Clayton Fraser and James Jurale  
Fraserdesign  
Loveland, Colorado

October 19, 1985

### HISTORICAL INFORMATION

Milk Lake, an isolated body of water in the Yellowstone River drainage, is situated in a glacial cirque on the west side of the divide that separates the Yellowstone from the Swift Creek drainage. In August 1931, Chester Hartman, George Rogers and S. K. Daniels filed an application for a special use permit to store irrigation water on Milk Lake. Despite warnings by National Forest Service staff, the partners had by then already begun construction on a small-scale dam at the west end of the lake and, by 1935, it was completed. The permit was finally granted by the Forest Service in July 1938. Once described as "one of the best projects in the district," the Milk Lake Dam was a grouted masonry structure with a sloped and riprapped downstream face. It began to leak in 1939 and burst in 1940. The breach repaired, the dam functioned until 1973, when continual structural and administrative problems prompted the Forest Service to withdraw the permit. The structure has begun to leak again, and it is proposed to demolish it to lower the water to its natural level.

### ARCHITECTURAL INFORMATION

Dam length: 218 feet  
Dam height: 12 feet  
Dam width: 7 feet  
Construct: Grouted fieldstone dam with stone riprap facing on downstream side  
Lake size: 21.9 acres; 195 acre-foot maximum capacity; 9 vertical foot maximum drawdown  
Outlet: Gated steel pipe

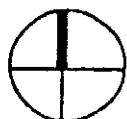
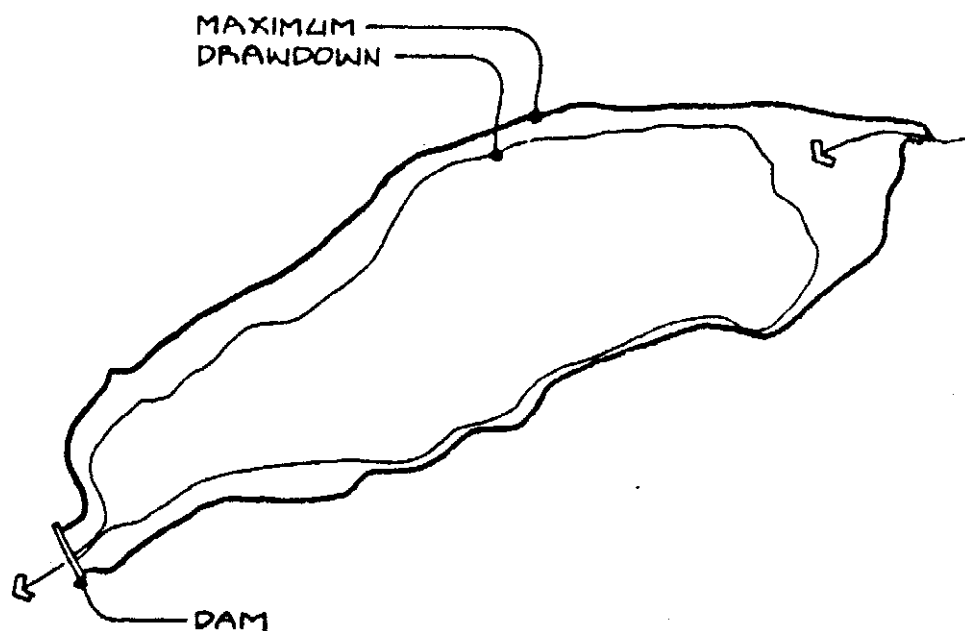
### BIOGRAPHICAL INFORMATION

"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Upalco Unit, National Forest Service Report, 1968, n.p.

Milk Lake Reservoir File, Roosevelt District Ranger Office, Ashley National Forest, Roosevelt, Utah.

Field inspection by Clayton Fraser, July 29, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.



SCALE : 1" = 600'